*** Your "SOURCE" for the "HOTTEST" News in Radiation Safety ***

THE RADCO REGISTER

VOLUME 14, No.1 ..... Winter 2004

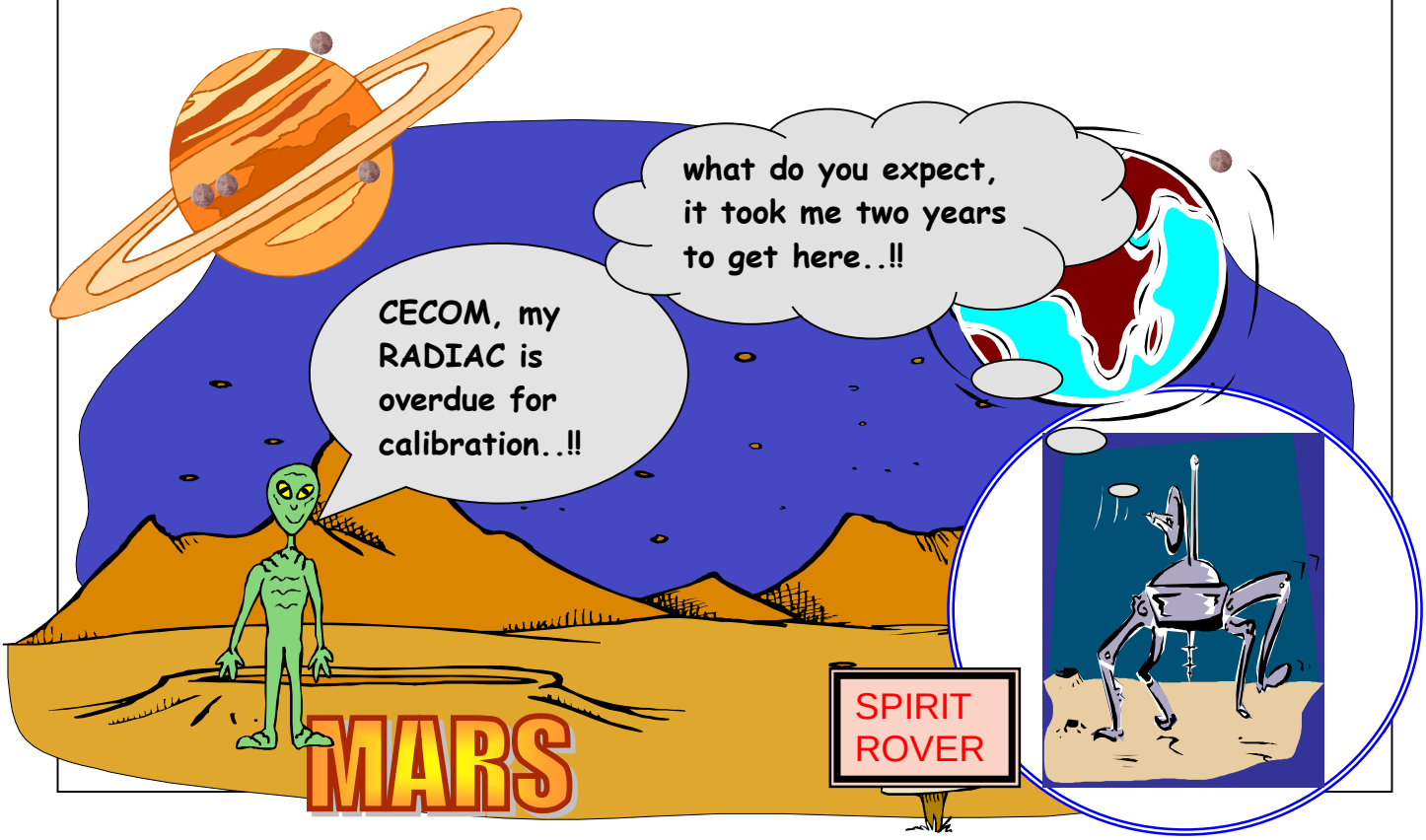
A CECOM PUBLICATION FOR THE U.S. ARMY NATIONAL GUARD

DIRECTORATE FOR SAFETY
US ARMY, CECOM
Safe by Design

We've **launched** our Customer Feedback System..!!

Now please send us some "**probing**" data…

(read all about it on pg 6)



in this issue....

The distribution and content of this newsletter is directed to Army National Guard activities for which the U.S. Army Communications-Electronics Command (CECOM) Directorate for Safety, Radiological Engineering Division, serves as RSSO. The RADCO Register is published quarterly and is intended as a medium for the exchange of radiation safety information between CECOM and the National Guard Bureau. The primary distribution of this newsletter is to Occupational Health/State Safety Offices, U.S. Property & Fiscal Offices, and Combined Support Maintenance Shops, with local reproduction encouraged.

Visit us on the WEB:
www.monmouth.army.mil/cecom/safety

RADIATION SAFETY STAFF OFFICER (RSSO):
Mr. Stephen G. LaPoint, x6401
Director

RADIOLOGICAL ENGINEERING (RE) DIVISION STAFF:
Mr. Craig Goldberg, x6405
Division Chief
Mr. Hugo Bianchi, x6444
Health Physicist
Mr. Burt Cummings, x6426
Health Physicist
Mr. Al Perrella, x6443
Health Physicist
Mr. Ken Proctor, x6446
Electronics Engineer
Mr. Barry Silber, x6440
Health Physicist
Mr. Nicholas Bykovetz, x6441
Health Physicist
Ms. Alice Kearney, x6432
Safety Specialist
Mr. Gary Ziola, x6433
Health Physicist

CONTRACTOR SUPPORT TO RE DIVISION STAFF:
Mr. Nick Antonelli, x6448
Count Room Technician
Mr. Jason Simpson, x6450
Instrument Technician
Ms. Mary Chislett, x6452
Instrument Technician
Mr. Otto Bismarck, x6429
Laboratory Technician

MAILING ADDRESS:
Commander, US Army CECOM
ATTN: AMSEL-SF-RE
Bldg 2539, CHARLES WOOD AREA
Fort Monmouth, NJ 07703-5024
VOICE: DSN: 987-3112
COM: (732) 427-3112
FACSIMILE: DSN: 992-6403

LABORATORY ADDRESS:
Commander, US Army CECOM
ATTN: AMSEL-SF-RE **(LAB)** Bldg 2540
Fort Monmouth, NJ 07703-5024
VOICE: DSN: 987-5370
COM: (732) 427-5370
FACSIMILE: DSN: 987-2667

EMAIL: AMSEL-SF-SEC@
mail1.monmouth.army.mil

ON GUARD...

Alex, I'll Take Generally Licensed Items for $100... Avoiding Double Jeopardy with Licensed Material!

"What is FALSE, Alex."

"That is Correct, SGT...!!"

Today's Jeopardy category is Generally Licensed Items. Many of our ARNG "contestants" have expressed interest in purchasing some of these items from out there in the commercial world, outside of the Army Supply System. These items, which are needed to balance TDA requirements, enable the military to better assimilate with state personnel and their response capability…so long as the funding is available.

Some of these commercially procured items happen to contain radioactive material and, to complicate matters, some of your sales reps may have told you that even though these items contain radioactive material, you've got nothing to worry about because they aren't licensed. So is this TRUE or FALSE? (Don't forget, your answer must be in the form of a question).

Many of these items fall in the category of Generally Licensed Items and still have to meet certain regulatory requirements.

An example of this is the APD-2000 Ion Mobility Spectrometer from Smiths Detection, formerly the Environmental Technologies Group, Inc. This item is similar to the M43A1 Chemical Agent Detector (CAD), Chemical Agent Monitor (CAM), Improved CAM, and/or the M22 Chemical Agent Alarm. The difference between the Ion Mobility Spectrometers and these fielded items is that no specific license is issued for the Ion Mobility Spectrometers, unlike its Army radioactive commodity counterparts.

Even though no specific license is issued by the NRC, requirements for generally licensed devices currently being procured must be established by the purchaser, IAW 10 CFR 31.5, to avoid noncompliance with NRC and Army regulations.

OK contestants, getting back to our Jeopardy category….. what "5" things must owners of these devices assure in order to possess Ion Mobility Spectrometers..??

and the answer for $200 is…. *Whom does the program for control of these devices within the Guard fall under?*

The program for control of these devices within the ARNG ultimately falls under the jurisdiction of the State Radiation Safety Officer (SRSO). The SRSO must be notified of the purchase or planned purchase of the items so that he/she can assure that a program is developed by the owners and/or users of the device.

and the answer for $400 is…. *What is the inventory requirement for this item?*

The item must be inventoried by the owner and included on the SRSO's master list.

the answer for $600 is…. *What is the training requirement for users/owners of these items?*

Usually, familiarity with the operators manual is adequate training, however, someone in the unit should be designated to coordinate with the SRSO.

the answer for $800 is…. *Is there a leak test requirement for this item?*

A semi-annual leak test must be performed. Leak tests provided to us for analysis are tracked in our database. (You should notify us that you have the item so we can provide the necessary leak test analysis services).

finally, the answer for $1000 is…. *What are the maintenance requirements for this item?*

Owners of the device must follow specific maintenance and any other requirements that have been approved under the provisions of the General License. Maintenance for the Ion Mobility Spectrometers can only be performed by the manufacturer and not by your Combined Support Maintenance Shop (CSMS). CSMSs performing maintenance on these devices is prohibited and will jeopardize the General License requirement for these devices.

Congratulations contestants, you all get an A+ on the generally licensed items category. Remember, just because items are generally licensed doesn't mean that they do not have to be controlled or meet regulatory requirements. Additionally, you are required to notify the NRC prior to transfer of the item. If this is planned, contact us for assistance.

Controls for other generally licensed items may vary dependent upon the item. So to avoid "Generally Licensed Item Double Jeopardy," your cooperation in this matter is needed to assure compliance to NRC and Army regulatory requirements.

We've come to the end of our column, so today's Final Jeopardy Question is: *If you have any questions regarding purchasing off-the-shelf items that contain radioactive material or other items such as devices that produce x-rays, who should you call..??*

If you answered *"who is Barry Silber at the CECOM DS.?"* you're today's Jeopardy winner.

"Why, I Do Declare"...!! Important Information for All Females Assigned Dosimetry

Radiation exposure limits for a pregnant female are somewhat different from those of other radiation workers. The reason the NRC has made this limit is to protect the embryo/fetus from unnecessary radiation levels that may put the baby at risk. You, the worker, must make your own decision. Although management has no legal right to know whether or not an employee is pregnant, female employees should be encouraged to report their pregnancy to their immediate supervisor as early as possible so that relevant issues can be addressed promptly.

With that in mind, we have assembled a few commonly asked Questions & Answers

concerning females of childbearing age that work with radioactive materials or radiation-producing devices and who have been issued radiation dosimetry. This information, originally published by the NRC, outlines the females' rights, as well as a course of action that females should consider regarding Pregnant Worker Declaration and Notification.

Why do I need this information?
The regulations allow a pregnant woman to decide whether she wants to formally declare her pregnancy to take advantage of lower dose limits for the embryo/fetus. This information is provided to help women make an informed decision whether to declare a pregnancy.

If I become pregnant, am I required to declare my pregnancy?
No. The choice whether to declare your pregnancy is completely voluntary. If you choose to declare your pregnancy, **you must do so in writing** and a lower radiation dose limit will apply to your embryo/fetus. If you choose not to declare your pregnancy, you and your embryo/fetus will continue to be subjected to the same radiation dose limits that apply to other occupational workers.

If I declare my pregnancy in writing, what happens?
If you choose to declare your pregnancy in writing, your supervisor must take measures to limit the dose to your embryo/fetus to 0.5 rem during the entire pregnancy. This may mean that if you declare your pregnancy, your supervisor may not permit you to do some of your normal job functions if those functions would have allowed you to receive more than 0.5 rem.

What if I decide that I do not want any radiation exposure at all during my pregnancy?
You may ask your supervisor for a job that does not involve any exposure at all to occupational radiation dose, but he/she is not obligated to provide you with a job involving no radiation exposure.

What effect will formally declaring my pregnancy have on my job status?
Only your supervisor can tell you what effect a written declaration of pregnancy will have on your job status. As part of your radiation safety training, the Radiation Safety Officer (RSO) should tell you about the policies with respect to the job status of declared pregnant women.

What information must I provide in my written declaration of pregnancy?
You should provide, in writing, your name, a declaration that you are pregnant, the estimated date of conception (only the month and year need be given), and the date that you give the letter to the Supervisor and RSO. (*A form letter is included in the last page of the RADCO..*)

To declare my pregnancy, do I have to have documented medical proof that I am pregnant?
NRC regulations do not require that you provide medical proof of your pregnancy. However, this does not preclude your supervisor from requesting medical documentation of your pregnancy.

Can I tell my supervisor orally rather than in writing that I am pregnant?
No. The declaration must be made in writing.

If I have not declared my pregnancy in writing, but my supervisor suspects that I am pregnant, do the lower dose limits apply?
No. The lower dose limits for pregnant women apply only if you have declared your pregnancy in writing.

If I am planning to become pregnant but am not yet pregnant and I inform my supervisor of that in writing, do the lower dose limits apply?
No. The requirement for lower limits applies only if you declare in writing that you are already pregnant.

What if I have a miscarriage or find out that I am no longer pregnant?
If you have declared your pregnancy in writing, you should promptly inform your supervisor and RSO in writing that you are no longer pregnant. However, if you have not formally declared your pregnancy in writing, you need not inform your supervisor and RSO of your non-pregnant status.

How long is the lower dose limit in effect?
The dose to the embryo/fetus must be limited until you withdraw your declaration in writing or you inform your supervisor in writing that you are no longer pregnant. If the declaration is not withdrawn, the written declaration may be considered expired one year after submission.

If I have declared my pregnancy in writing, can I revoke my declaration of pregnancy even if I am still pregnant?
Yes, you may. The choice is entirely yours. If you revoke your declaration of pregnancy, the lower dose limit for the embryo/fetus no longer applies.

So there you have it… As a female of childbearing age, the decision to declare your pregnancy is completely yours. The NRC has a limit of 5 mSv (0.5 rem) for fetal exposure. This is 1/10 of the normal yearly exposure limit for radiation workers. In addition, your supervisor must attempt to keep the monthly dose rate uniform.

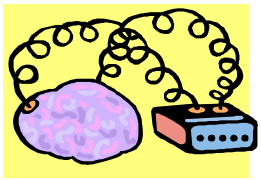
We suggest you visit the NRC website www.nrc.gov/reading-rm/doc-collections/reg-guides, Regulatory Guide 8.13., or click on 10 CFR 20.1208, or Regulatory Guide 8.29, Revision 1 for additional information. A Form Letter for Declaring Pregnancy has been provided at the enclosure to this RADCO. And it's a good idea to check with your SRSO for any additional state-specific information that may be required.

Should you have further questions regarding this or other "pregnancy in the workplace" issues please contact Alice Kearney of our staff. She was once a baby too, you know…

Tallyho..!! We're Requesting Your Feedback

Your chance has come to level the playing field with CECOM…instead of us coming out to evaluate your Radiation Safety Program, we are requesting you take a little time and evaluate us for a change! Now that's one crazy turn of events if there *ever* was one.

We here at CECOM provide numerous services to the field and are very interested in how well we are performing when we provide you with these various services (i.e., calibration of RADIAC instrumentation, wipe/leak test analysis, Health Physics consultation, Radiation Safety Officer courses, RSP evaluations, etc.). Your input is valued and will be used to enhance future support. So don't be shy, just imagine you are attending a CECOM RSO course and you were just asked to introduce yourself to the class…on second thought, I forgot we were looking for feedback, not the proverbial reply of, "I work with 'so and so' and the work I do is the same as him!" We invite you to speak **your mind**, because after all, our programs are built with you **in mind**..!!



To acquire your opinion of our performance, we have developed a Customer Feedback System, which you can access at: https://cecom100.monmouth.army.mil/safety/resurvey/welcome.asp. Once you have accessed the system, just follow the directions to provide us with your responses to the survey(s). We would like to thank you in advance for completing the survey(s), and encourage you to contact us directly if you have any questions or comments. Now hurry and get your well-regarded opinions in before all the good ones are taken..!!

in the field.... by lyle farquhar

Back to School.....

We here at CECOM offer training courses throughout the year for the many Guardsmen responsible for the Radiation Safety Programs at their unit or facility. Our 40-hour Radiation Safety Officer (RSO) Training course gives you the broadest radiation safety training, and will qualify you as an RSO at any location with the exception of aviation units that use the LORAD NDTE system (a system used for structural-integrity x-ray screening of aircraft components).
Our 24-hour Radioactive Commodity Identification and Transportation (RCIT) course gives you a broad knowledge with regard to identifying and transporting radioactive commodities and materials by means of commercial carriers. Our LORAD RSO training course (usually given once per year) qualifies you to be an RSO for the LORAD industrial X-ray system. Finally, we also offer an 8-hour AN/UDM-2 Calibrator Operator Training course here at Fort Monmouth, as the need arises.

Remember, SRSOs and Alternates are required to have bi-annual (every two years) refresher training; for others, RSO training is required initially and is recommended periodically thereafter (see NGR 385-11).

So with that, we'd like to remind you of the following deadlines that are fast approaching for applying to one of our upcoming courses:

RSO, in San Diego, CA. Deadline: 26 JAN 2004.

RSO, in New Orleans, LA. Deadline: 23 FEB 2004.

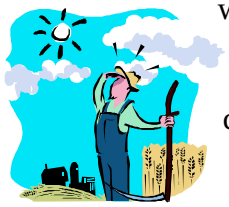
LORAD, in Groton, CT. Deadline: 08 MAR 2004.

RCIT, in Houston, TX. Deadline: 27 APR 2004.

When processing your DD Form 1556, don't forget to get your State RSO to sign the "approved for training" signature block. Once all the required signatures are obtained, simply fax the form over to us @ DSN: 992-6403 or Comm: 732-532-6403. And do check back with us to make sure we have received your form.

So what are you waiting for…?? Classes fill up fast….. get your application in before you **"miss the boat"..!!** ☆

The Simple (kind of) Life… Introducing our New "Reality" Response Check ..!!



Life is good…… and it's gotten even better…. Our Lab is now calibrating the DT-674/PDR-77 X-ray Probe, which is contained in some AN/PDR-77 RADIAC Sets. These RADIAC probes are fielded primarily to the Civil Support Teams (CST) throughout the ARNG!

And with that, you may have noticed that the calibration report has changed. The new report lists the 17 & 60 keV Area (1 sq/m) Counting Efficiency and Detection Limits, as well as the response test range for the X-ray probe . "Well, y'all knew you were gonna have to response test that der' probe before using it now, didn't y'all ..?"

And if you're not sure what to do…don't get your "hens in a stir" just yet, cause it's simple… so simple we're sure even Paris Hilton could do it ! (And we'll bet "the farm" that you get it right the first time).

Below is a rundown of the New Response Test procedure. And should you forget exactly how to do it when your AN/PDR 77 comes back from calibration, there's no cause for worry, because we've placed the Response Test procedure inside the lid of your RADIAC Case.

Response Testing the AN/PDR-77 DT-674 X-ray Probe

① Connect the DT-674 to the AN/PDR-77.

② Perform the pre-operational test as outlined in Technical Manual TM 11-6665-365-40.

③ Remove the white plastic protective cover from the DT-674.

④ Turn the selector switch to the PEAK ALIGN position.

⑤ Place the DT-674 over the check source as shown. Ensure the X-ray side is facing towards the detector.

⑥ Compare the displayed reading on the AN/PDR-77 to the **Response Test Range** listed on the Calibration Report.

⑦ If the displayed reading is within the **Response Test Range** listed on the Calibration Report, the AN/PDR-77 may be used.

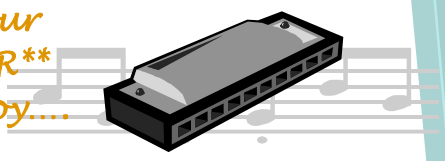
⑧ If the displayed reading is not within the **Response Test**

Range listed on the Calibration Report, an out-of-tolerance condition exists. Return the instrument for repair.

⑨ And finally, complete the Response Test Log.

So whether you're a fan of John Denver (old school) or Paris Hilton (new school) …. or your still stuck in your "HEE HAW" days…:

*" live a good life and use your FIDLER** with joy….*



and thank heavens above, you're still a country boy !"

** Field Instrument for Detection of Low Energy Radiation ☆

We be Jammin' in "My Jammy"

Congratulations for another job well done to all of the Army National Guard members who attended the CECOM Directorate for Safety 40 Hour Radiation Safety Officer Course held in Miami, (a.k.a., "**My Jammy**") Florida on 8-12 December 03. The early season blizzard that ravished the northeast threatened to strand the two instructors in New Jersey, however, they both arrived safely to open the course with a flurry….***snow flurry***, that is..!! We would also like to take this opportunity to recognize the two students who distinguished themselves by achieving the highest final course grade of 100. That honor goes to COL Katie Hundley, the SRSO from Virginia and MSG William Ladd, the LRSO from the CSMS in Iowa. Their exceptional performance is indicative of all the hard-working RSOs that attended the class and who, thanks to a short-lived but well-deserved week in southern Florida, are all now fluent in "**Spanglish**" (the unofficial everyday language of "**My Jammy**.)"

Ring Out Your Old Inventory…..and Ring in the New..!!

It's that time of year again, everyone is shopped out, heads are groggy from too much champagne, bits of confetti are uncovered in the strangest of places…. and many SRSOs decide to run their yearly radioactive materials inventory report. Since the demise of SPBS last year, we have been working with the Logistics Support Activity (LOGSA) to develop an automated program, compatible with PBUS\E, that will enable ARNG Property Book Officers (PBO) to generate an inventory report for all radioactive commodities within their respective state or territory. We hope to have this new program available for use in the near future. In the interim, we had worked out an alternate method for obtaining this report which involves inputting Line Item Numbers (LINs), taken from last year's inventory, into

PBUS\E and conducting a search (this procedure was explained in the prevoius RADCO). Although inputting all your state's LINs into PBUS\E can be somewhat time consuming, it proved to be a practical alternative to conducting unit-level physical searches for each radioactive commodity.

So as part of our New Year's resolution to get your inventory tended to, we recently devised a second alternate method for generating the report utilizing the radioactive Special Control Item (SCI) Codes. This new method was tested by CW2 Bonnie J. Lahr, the PBO for the North Dakota ARNG. **How 'bout a big New Year's toast for Bonnie..!!**

Using the SCIC codes of **(8, A, B, F, G, H, K, S, T, U, W,** and **X)** which indicate an item of supply contains radioactive material, she was able to create a Joined View AD HOC report within PBUS\E that pulls up the information needed to generate the report.

Mind you, it helps if you've worked with the AD HOC reports in the past and are somewhat familiar with how-to-join tables. But once you've figured out how to join two tables together it is not too difficult at all. One glitch, however, is that in order not to overload the AD HOC report process, you'll need to modify your constraints to do a report for 8 & A, a separate one for B, a separate one for F, and so on….. Using the LIN as the common factor, the two tables you need to join are the catalog table and hand receipt asset table. Once you have your report set up it's just a matter of clicking a button to get the results.

Here's how it's done……

In the PBUS-E System:

*** Click on Reports**

*** Click on Ad Hoc Queries**

*** Click on New Joined View**

*** Enter a View Name and View Description**

*** Click on Add Join**

*** Table 1 select the Catalog Table – select LIN within this table**

*** Table 2 select the Hand Receipt Asset Table – select LIN within this table**

*** Click on Add Join**

*** Click on Save**

*** Return to View List**

*** Find your view name – click on create new**

*** Add a report name**

*** Now select the items from the Available Fields box that you want to have on your report. You arrange these fields in the order that you desire.**

*** Click on Save**

*** Next you want to add constraints – Click on Modify Constraints**

*** The Constraint that you want is the SCI Code – The SCI Code would be equal to 8 or A or B or F or G or H or K or S or T or U or W or X. If multiple constraints are being used on one report, ensure that you change to toggle to OR or AND as appropriate. Depending on the size of your installation code, you may have to make several different reports using the different SCI Codes as constraints. For example, one report with the SCI Code 8 as a constraint, one report with the SCI code A as a constraint, one report with SCI Code B as a constraint, etc., etc.**

So out with the old … and in with the new (inventory, that is). And if your Property

Office is feeling footloose and fancy free in 2004…why not "**jump start**" the New Year and "**kick out**" a report using this alternative automated procedure. Contact Gary Ziola, of our staff, for further assistance. ☆

Something has "CAM of Age"! Modification Work Order (MWO) Issued for the CAM

Attention all Chemical Agent Monitor (CAM) maintenance personnel, State RSOs, and CAM users..!! The time has come to replace the drift tube modules and sieve pumps in all your CAMs. The good news is that this work will be performed by a contractor; the bad news is that each state is responsible for getting the CAMs to the contractor's facility. To make this work order go smoothly, we offer the following guidance:

IAW the Soldier and Biological Chemical Command (SBCCOM) MWO Office, MWO 3-6665-331-55-1 is to be implemented using the following directions provided by the Logistics Staff Officer at NGB:

MWO…..

The Joint Program Manager for Contamination Avoidance from SBCCOM is ready to accept CAMs (LIN # C05701; NSN 6665-01-199-4153) in compliance with the aforementioned MWO. In preparation for collection of the CAMs we will need the following information in order to finalize the Memorandum of Agreement:

* Name, phone number and email of the following personnel:

1. State/territory Radiation Protection Officer

2. State/territory Serialization Officer

3. User (POC by UIC) for each affected unit

* Roll-up list of # of CAM units by serial number, state/territory,and UIC (Excel spreadsheet).

* Identify a central location in each state/territory for collection and POC for the collection process.

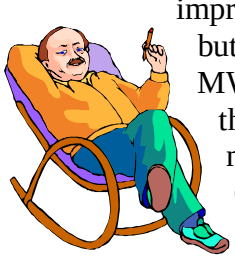
Note: Your state/territory will not be able to turn over the CAM units for the refurbishment until this information is provided and the refurbish schedule is posted. First come, first served. Please direct your individual unit administrator/Supply SGT to direct all correspondence through your respective collection POCs.

This information should have been disseminated before 31 Dec 2003. If you have not done so, please do so immediately. Further coordinating instructions will be furnished as they become final. ☆

Once you have received the final coordinating instructions, you can begin having the affected units provide the CAMs to your collection point (i.e., CSMS or USP&FO). The collection point will be required to store these items in a posted radioactive material storage area until they are shipped to the contractor who will be performing the MWO.

The posting requirements of this storage are the same as any other radioactive material storage area. There are no survey requirements for this area since maintenance is not being performed on these items.

Finally, to ensure your CAM is shipped to the contractor properly, you should follow the CAM shipping directions attached to the back of this newsletter.

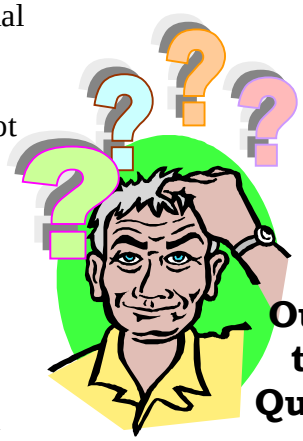


Not too many things improve with age, but thanks to this MWO, some things **do…** mainly your CAM. If you have any questions with regards to implementing this MWO in your state, please give Al Perrella of our staff, a call . ★

We Stand Corrected...

We are pleased to see that some of our readers dissect our RADCO articles with a **fine tooth comb**.

A case in point is Daryl J. Thruston's (MOARNG) observation that our article on the leak-test rule changes for the CAM stated, incorrectly, that "Change No. 4 of Technical Manual 3-6665-331-23&P, 12 JUNE 1992, corrections [were] dated 30 April 2003". In fact, Change 4 Corrections were dated 28 May 1999; the additional Change 6 Corrections were dated 30 April 2003. Thanks for setting us straight. Now can I borrow your comb..??



It's Outta' the Question! w/Burt "the answer man"

Our first question comes from 1SG Dee Ploy from Shippinout, Virginia.

***Question*:** "We are about to deploy overseas and are required to bring all of our M43A1s and CAMs. What type of radiological surveys are required to be performed on the vacated Radioactive Material Storage areas?"

Answer: Before we answer SGT Ploy's question, we must understand that "vacated storage areas" does not include bulk/depot storage or storage areas associated with maintenance operations. The answer is **NO** radiological surveys are required! Remove the "Caution - Radioactive Material" sign after the items have been removed. Ensure that the Serialization Officer at the USP&FO is notified for accounting purposes. However, if the unit had a "leaker" (i.e., failed leak test in the past) stored at a particular location, a removable contamination survey would be required of the storage area before the "Caution - Radioactive Material " sign is taken down. Maintain the survey wipe test (to include negative results reported by the analysis lab) report indefinitely.

Our second question is from CWO Johnny Caas from Excess, Nevada, and deals with leak test requirements for unserviceable items turned in for disposal.

Question: I recently turned in several unserviceable M43A1s to the USP&FO for disposal. When talking to the folks there, they informed me that our next radwaste pickup might not happen for several months. My question is, do I need to keep them on my TIMMS system and am I required to perform the annual leak test if they are not picked up prior to the next schedule leak test date?

Answer: In short, once the items have been deemed unserviceable and classified as radwaste, no further leak tests are required. Based on that, you may remove them from your TIMMS system, as no further maintenance actions would be required. Ensure that the serialization officer at the USP&FO is aware that the items have been turned in for disposal so they can properly update the DOD RATTS database.

Our last question comes from Mr. Al Bets, who wants to know who's gonna' win the Super Bowl. Sorry Al, wish I could help ya' out, but I'm a Saints fan….shows you how much I know about football ☆

PUZZLES & BRAIN-TEASERS

QUICKIE QUIZ:

1. The current leak test procedure for the CAM requires you to remove the nozzle protective cap.

TRUE FALSE

2. The current leak test request form used to submit leak test samples for analysis to the CECOM lab was revised on:

a. September 2002
b. July 2003
c. May 2002
d. October 2003

3. The current special form certificate for the AN/UDM-2 RADIAC Calibrator set expires on:

a. 31 AUG 2003
b. 31 JUL 2008
c. 10 JAN 2004
d. Super Bowl Sunday

4. Storage areas of tritium fire control devices under TACOM-RI's NRC license says that the storage areas shall be surveyed:

a. annually
b. weekly
c. semi-annually
d. quarterly

5. With the fielding of the new PBUS/E property accounting program, RATTS is no longer in effect.

TRUE FALSE

NONIONIZING CORNER .....

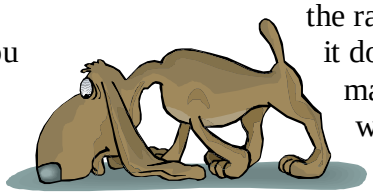
Receiving the Right Signals from your AN/VRC-87 Radio Set...

What would you do if you learned that a new piece of communications gear was going to be added to your unit's inventory? Should you automatically add it to the non-ionizing radiation safety equipment listing? The answer is that you might not need to.

Not all communications equipment is meant, or designed, to actually transmit electromagnetic energy. Sometimes when someone

refers to a piece of "commo" gear (e.g. R-442), what they are referring to is a box designed to receive signals. From a radiation safety perspective, such a unit would pose no radiation safety concern. This is also the case for antennas. Just because one day you discover some gigantic antenna being constructed (e.g., a satellite dish) somewhere on your installation, don't assume you automatically have a problem, it may just be a receiving antenna.

You might ask how you can tell a transmitting antenna from one that receives only, but you'd get a frustrating answer….you can't most of the time! Of course, that shouldn't stop you from asking around to determine whose antenna it is or whose "commo" system got parked in front of your office. Sometimes that's the ONLY way you're going to find out whether a system needs to be added to your non-ionizing radiation inventory listing.



If all you learn by **snoopin'** around is the ***Type Designation*** (e.g. AN/VRC-87, etc.), it just might be all you need. With the type designation, you can look for any available radiation safety information in our TB 43-0133 "Hazard Controls for CECOM Radiofrequency and Optical Radiation Producing Equipment." *Hmmm*. You say you don't have one of these beasts? That's no problem, simply get to a computer that provides Internet access and go to http://www.monmouth.army.mil/cecom/safety/main.htm. Once you're there, select "Radiological Engineering." The next thing to do is select "Publications" and you'll see TB 43-0133. You can select that document and use it on-line or download a copy for your computer. Or you could just order thru normal pubs channels.

Once you're in the TB, look up the AN/VRC-87. You'll see it's a "low power," Vehicular Short Range Radio Set that uses a whip antenna. The term "low power" is vague but it does let you know that the radio ***transmits*** and that it does so at the tune of a maximum output of 5-watts. It also let's you know that the radio operates in the 30 – 88 MHz frequency range.

So far, this doesn't tell you what you need to know about radiation safety, but it gives you some more information about the radio itself. Reading on you see that the system is ***not able*** to produce potentially hazardous power density levels (PDLs) in excess of the safety standard and is ***NOT*** subject to radiation safety control. That means you don't have to list it, right? ***WRONG!*** Just because a transmitter or R/T unit (Receiver/Transmitter) can't, by itself, produce hazardous power density levels from the antenna, doesn't let you off the hook. ***NEVER*** touch an antenna or any of the RF connections when the transmitter is doin' it's thing. You could get yourself a nasty RF shock or burn and ***BOTH*** hurt for a long time because they heal from the ***inside out!*** As long as such a system transmits, you should list it in the non-ionizing radiation inventory because there's almost always the risk of RF shock or burn with such a system, and there is always the possibility that an outboard RF amplifier could be "strapped-on" making the system a 50-watt transmitter!

Should you require further information on the AN/VRC-87 or any other radio equipment in your unit, feel free to contact Ken Proctor of our staff. ☆

QUICKIE QUIZ SOLUTIONS:

1. The current leak test procedure for the CAM requires you to remove the nozzle protective cap.

TRUE **FALSE**

2. The current leak test request form used to submit leak test samples for analysis to the CECOM lab was revised on:

a. September 2002
b. July 2003
c. May 2002
d. October 2003

3. The current special form certificate for the AN/UDM-2 RADIAC Calibrator set expires on:

a. 31 AUG 2003
b. 31 JUL 2008
c. 10 JAN 2004
d. Super Bowl Sunday

4. Storage areas of tritium fire control devices under TACOM-RI's NRC license says that the storage areas shall be surveyed:

a. annually b. weekly
c. semi-annually **d. quarterly**

5. With the fielding of the new PBUS/E property accounting program, RATTS is no longer in effect.

TRUE **FALSE**

Hot Off the Presses!

NEW CECOM NRC License 29-01022-14

Take a good look at the expiration date on your CECOM Consolidated NRC Materials License, Number 29-01022-14. Is it October 31, 2003? If so, you need to download the current Amendment Number 27, the new expiration date is October 31, 2013. Download it from the CECOM website at: http://www.monmouth.army.mil/cecom/safety or go to the DA RSO website at: http://www.monmouth.army.mil/rso (remember that this website requires an AKO Login User ID and Password.)

RADCO REGISTER CHANGE/ADD-ON E-MAIL ADDRESS FORM

The **RADCO Register** is published by the CECOM DS to support the NGB State Radiation Safety Programs. It is distributed electronically. Help us ensure you don't miss a single issue.

Please fill out this form and FAX it back to us @ **732-542-7161**. You can also mail it to: USACECOM, Directorate for Safety (DS), ATTN: AMSEL-SF-RE (ZIOLA), Building 2539, Fort Monmouth, NJ 07703-5024. Or better yet, email your info to us at: gary.ziola@mail1.monmouth.army.mil

Name: _____ **Title:** _____

Organization/Facility: _____

Address: _____

City: _____ **State:** _____ **Zip:** _____

E-mail: _____

SHIPPING INSTRUCTIONS/CHEMICAL AGENT MONITOR/NSN 6665-01-199-4153

Isotope and Activity: Ni-63, 5.55E+08 Bq (15 mCi maximum activity) (The activity may be 3.7E+08 Bq (10 mCi), if marked as such.).

Proper Shipping Name/Hazard Class/UN Number:
Radioactive material, excepted package - instruments/7/UN2911.

Chemical and/or Physical Form: Plated Ni-63, solid.

Construction Form: Normal form.

Package Requirements:
Packaging: Packaging meeting the General Design Requirements of 49 CFR 173.410 or the General Packing Requirements of IATA 10.5.3 and 10.3.10 as applicable.

Package Label: Not required.

Package Markings:

- The proper shipping name.

- The UN number preceded by the letters "UN."

- The permissible gross weight, if this exceeds 110 pounds (50 kg).

- Full name and address of the shipper and the consignee.

- The full name and address of the shipper and the consignee; the proper shipping name; the UN number; and gross weight shall be marked on the outside of the package or overpack at least ½ inch (12 mm) high.

Survey Requirements:

Radiation Survey: Required prior to shipment.

- The radiation level at 10 cm (4 inches) from any point on the external surface of any unpackaged instrument or article shall not exceed 0.1 mSv/hr (10 mrem/hr).

- The radiation level at any point on the external surface of the package shall not exceed 0.005 mSv/hr (0.5 mrem/hr).

Contamination Wipe Survey: Performance of the package wipe survey and receipt of analysis results are required prior to shipment.

- The non-fixed radioactive contamination on the external surfaces of the package shall not exceed 22 dpm/cm^2 (beta).

Additional Requirements: Declared shipments are permitted aboard passenger-carrying aircraft. However, the airlines have the first right of refusal regarding the acceptance of packages containing radioactive materials or other hazardous materials.

Vehicle Placard: Not required.

Certification Requirement: You shall certify this radioactive material for transportation by having a notice enclosed in or on the package, included with the packing list, or otherwise forwarded with the package. This notice must include the name of the consignor or consignee and the statement:

"This package conforms to the conditions and limitations specified in 49 CFR 173.424 for radioactive material, excepted package - instrument, UN2911."

Additional Comments:

- There is a maximum of 30 TBq (810.8 Ci) total activity for Ni-63 that you may ship per package.

- You may mail (USPS) up to 3.0 TBq (81.08 Ci) total activity of Ni-63 per package. All other 49 CFR conditions applicable to excepted packages for limited quantities of Class 7 materials, as indicated above, also apply to this USPS shipment.

FORM LETTER FOR DECLARING PREGNANCY

This form letter is provided for your convenience. To make your written declaration of pregnancy, you may fill in the blanks in this form letter, you may use a form letter your supervisor has provided to you, or you may write your own letter.

DECLARATION OF PREGNANCY

To: _____

In accordance with the NRC's regulations at 10 CFR 20.1208, "Dose to an Embryo/Fetus," I am declaring that I am pregnant. I believe I became pregnant in_____ (only the month and year need be provided).

I understand the radiation dose to my embryo/fetus during my entire pregnancy will not be allowed to exceed 0.5 rem (5 millisievert) (unless that dose has already been exceeded between the time of conception and submitting this letter). I also understand that meeting the lower dose limit may require a change in job or job responsibilities during my pregnancy.

_____

(Your Signature)

_____

(Your Name Printed)

_____

(Date)